

AMENDMENTS TO CLAIMS

Claims 1-31 (canceled)

Claim 32 (new): A method of forming a vibration damping system for a door assembly of an automotive vehicle, the door assembly including an exterior panel structure, the method comprising:

providing a door reinforcement selected from a beltline reinforcement member and an intrusion device and the door reinforcement having an exposed surface portion;

extruding an expandable vibration damping material in bonding contact over at least a portion of the exposed surface portion of the reinforcement prior to expansion, wherein:

- i) the expandable vibration damping material is substantially dry and tack free to the touch after extruding.

Claim 33 (new): A method as in claim 32, further comprising:

mounting the reinforcement to the door assembly with the expandable material disposed thereon; and

expanding the expandable vibration damping material to contact and adhere to the exterior panel structure.

Claim 34 (new): A method as in claim 33 wherein the expanding of the damping material occurs during a painting operation performed upon the vehicle.

Claim 35 (new): A method as in claim 32 wherein the step of extruding the damping material is performed robotically.

Claim 36 (new): A method as in claim 32 wherein the step of extruding the damping material is accomplished with mini-applicator.

Claim 37 (new): A method as in claim 32 wherein the damping material is in a viscoelastic state during extruding thereby allowing material to flow onto the reinforcement.

Claim 38 (new): A method as in claim 37 further comprising:
allowing the material to return to its generally dry state after extrusion onto the reinforcement thereby bonding the damping material to the reinforcement.

Claim 39 (new): A method as in claim 32 wherein the damping material is extruded as a single bead.

Claim 40 (new): A method as in claim 32 wherein the damping material is extruded as a plurality of nodes.

Claim 41 (new): A method as in claim 32 wherein the reinforcement member is a door intrusion beam that is metal, tubular or both.

Claim 42 (new): A method as in claim 38 wherein the expandable damping material is extruded onto the intrusion beam by a supplier and then the beam is shipped to a vehicle manufacturer for assembly to the vehicle by the vehicle manufacturer.

Claim 43 (new): A method as in claim 32 further comprising:
expanding the expandable damping material wherein the expandable damping material has an original volume prior to expansion and the expandable damping material expands to an expanded volume that is greater than 1000 % of the original volume.

Claim 44 (new): A method as in claim 40 wherein the nodes of the plurality of nodes each contact an adjacent node of the plurality of nodes and the exterior panel structure after expansion and wherein the nodes of the plurality of nodes are in a

random pattern after expansion thereby forming miniaturized chamber areas that absorb various vibrations and sound frequencies.

Claim 45 (new): A method of forming a vibration damping system for a door assembly of an automotive vehicle, the door assembly including an exterior panel structure, the method comprising:

providing an intrusion beam having a first end and a second end, the intrusion beam further having exposed surface portions between said first end and said second end;

extruding an expandable vibration damping material onto the exposed surface portions of the intrusion beam while the damping material is in a viscoelastic state such that the damping material flows onto the surface portions;

allowing the to bond to the surface portions of the intrusion beam, the material becoming substantially dry and tack free upon bonding to the intrusion beam;

transporting the intrusion beam with the expandable vibration damping material thereon;

mounting the intrusion beam to the door assembly with the expandable material disposed thereon; and

expanding the expandable vibration damping material to contact and adhere to the exterior panel structure wherein the expanding of the damping material occurs during a painting operation performed upon the vehicle and wherein the damping material expands to form a foam.

Claim 46 (new): A method as in claim 45 wherein the step of extruding the damping material is performed robotically.

Claim 47 (new): A method as in claim 45 wherein the step of extruding the damping material is accomplished with mini-applicator.

Claim 48 (new): A method as in claim 45 wherein the damping material is extruded as a single bead.

Claim 49 (new): A method as in claim 45 wherein the damping material is extruded as a plurality of nodes.

Claim 50 (new): A method as in claim 45 wherein the reinforcement member is a door intrusion beam that is metal, tubular or both.

Claim 51 (new): A method as in claim 45 wherein the expandable damping material is extruded onto the intrusion beam by a supplier and then the beam is shipped to a vehicle manufacturer for assembly to the vehicle by the vehicle manufacturer.